Hydrologic Soil Group
Benson County Area, North Dakota

The Hydrologic Soil Group table gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long–duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink–swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Hydrologic Soil Group--Continued
Benson County Area, North Dakota

Map symbol and soil name	Hydrologic group
3:	
Parnell	C/D
4:	
Fargo	D
5:	
Hegne	D
7:	
Colvin	C/D
8:	
Colvin	C/D
9:	
Rauville	D
11:	
Svea	B
Barnes	B
12B:	
Barnes	B
Svea	B
13C:	
Barnes	B
Buse	B
13D:	
Barnes	B
Buse	B
14:	
Svea	B
Hamerly	C
14B:	
Svea	B
Hamerly	C
15:	
Vallers, Saline	C
16:	
Vallers	C
18E:	
Buse	B
19:	
Tonka	C/D
21:	
Emrick	B
Heimdal	B
22B:	
Heimdal	B
Emrick	B
23C:	
Heimdal	B
Esmond	B
24:	
Fram	B
Emrick	B
25D:	
Esmond	B
Heimdal	B
25E:	
Esmond	B
Heimdal	B
26E:	
Esmond	B
Sioux	A
27C:	
Barnes	B
Sioux	A
28D:	
Barnes	B
Sioux	A
30D:	
Barnes	B
Buse	B
31B:	
Towner	B
33C:	
Dickey	B
34:	
Embden	B
Heimdal	B
34B:	

Hydrologic Soil Group--Continued
Benson County Area, North Dakota

Map symbol and soil name	Hydrologic group
Embden	B
Heimdal	B
34C:	
Embden	B
Heimdal	B
41:	
Overly	C
42:	
Gardena	B
42B:	
Gardena	B
Eckman	B
43C:	
Eckman	B
Zell	B
44:	
Glyndon	B
45:	
Bearden	C
46:	
Borup	B/D
47:	
Fossum	A/D
50B:	
Great Bend	B
52B:	
Embden	B
Egeland	B
53:	
Hecla	A
54B:	
Hecla	A
Maddock	A
58:	
Hecla	A
Maddock	A
59B:	
Maddock	A
Hecla	A
59D:	
Maddock	A
61:	
Renshaw	B
61B:	
Renshaw	B
63:	
Brantford	B
63B:	
Brantford	B
63C:	
Brantford	B
64:	
Divide	B
65:	
Vang	B
65B:	
Vang	B
66:	
Marysland	B/D
67:	
Marysland	B/D
68B:	
Arvilla	B
70B:	
Binford	B
71:	
Svea	B
Cresbard	C
71B:	
Svea	B
Cresbard	C
73:	
Larson	D
Cathay	C
74B:	
Cavour	D

Hydrologic Soil Group--Continued
Benson County Area, North Dakota

Map symbol and soil name	Hydrologic group
Miranda	D
75:	
Ryan	D
78:	
Ladelle	B
Aberdeen	C
82B:	
Darnen	B
83:	
Ladelle	B
85:	
Lamoure	C
86:	
Ladelle, Channeled	B
89:	
Grano	D
90:	
Parnell, Ponded	D
Lallie, Ponded	D
91C:	
Sioux	A
91E:	
Sioux	A
98C:	
Coe	A
98E:	
Coe	A
99C:	
Claire	A
101:	
Lallie	D
104:	
Lallie, Saline	D
106:	
Lallie, Wet	D
107:	
Minnewaukan	A/D
109:	
Aquents	C
110B:	
Aastad	B
Bottineau	B
112F:	
Edgeley Variant	B
113C:	
Bottineau	B
113D:	
Bottineau	B
119:	
Aberdeen	C
122:	
Fram	B
Cathay	C
123:	
Emrick	B
Cathay	C
123B:	
Emrick	B
Cathay	C
124C:	
Heimdal	B
Sioux	A
125C:	
Heimdal, Very Stony	B
Emrick, Very Stony	B
125F:	
Heimdal, Very Stony	B
Esmond, Very Stony	B
126:	
Fram, Saline	B
127:	
Fram	B
129:	
Borup, Saline	B/D
Colvin, Saline	C/D
131D:	

Hydrologic Soil Group--Continued
Benson County Area, North Dakota

Map symbol and soil name	Hydrologic group
Miranda Variant	D
133:	
Fordville	B
134:	
Borup	B/D
Vallers	C
135:	
Miranda	D
Larson	D
137:	
Stirum	B/D
140B:	
Svea	B
Buse	B
141:	
Embden	B
Letcher	D
144:	
Hamerly	C
Cresbard	C
144B:	
Hamerly	C
Cresbard	C
145:	
Grano, Saline	D
146:	
Hamerly	C
Tonka	C/D
149B:	
Maddock	A
150:	
Pits, Gravel	A
W:	
Water	---